

CHOOSING THE CORRECT NAME FOR *ACONOOGONON*
(*POLYGONUM* SECT. *ACONOOGONON*) IN ALASKA

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Polygonum alaskanum Wight ex Hultén (1944) represents the earliest validly published name for the species that was called *Aconogonon hultenianum* (Yurtz.) Tzvel. in a recent monograph (Hong, 1991). In many earlier works the authorities for *P. alaskanum* were given as “(Small) Hultén.” However, Small should not be cited as the parenthetical author because the latter’s earlier-published varietal name *Polygonum alpinum* var. *alaskanum* Small (1895) is an avowed substitute for *P. alpinum* var. *lapathifolium* Cham. & Schlecht., and hence it is illegitimate. The publication by Chamisso and Schlechtendal, however, does provide the description and type for the legitimate new name *P. alaskanum* published by Hultén.

DISCUSSION

Polygonum alaskanum Wight ex Hultén is widespread in Alaska and northwestern Canada. The purpose of this note is to call attention to the legitimacy of the above name (Hultén, 1944), and to correct the nomenclature for this species given in a recently published taxonomic treatment (Hong, 1991).

The taxon in question was first named at the varietal level as *Polygonum alpinum* var. *lapathifolium* Cham. & Schlecht. (Linnaea 3: 38. 1828). Small recognized this variety in his monograph of *Polygonum* in North America (1895), but gave it the new name *P. alpinum* var. *alaskanum* Small, while citing the name by Chamisso and Schlechtendal as a synonym. Small pointed out the prior existence of the species name *P. lapathifolium* L., based on a different type, and he may have been following the precedent of some other taxonomists of his time, who disallowed more than one use of a given epithet within a genus—even at different levels in the taxonomic hierarchy. In any case, the varietal name published by Small is an avowed substitute for the earlier var. *lapathifolium* of Chamisso and Schlechtendal; it is therefore nomenclaturally superfluous and illegitimate under the International Code of Botanical Nomenclature (Greuter, 1988, Art. 63; Kartesz and Gandhi, 1990).

Hultén (1944) was the first to propose a name at the species rank for this taxon. In his publication of *Polygonum alaskanum*, he cited "(Small) Wight nov. comb." as authorities for the name, and he gave "*Polygonum alpinum Alaskanum* Small, Monogr. N. Amer. Spec. Polyg. (1895) p. 33" as the basionym. Hong (1991) cited the authorities for *P. alaskanum* as "(Small) Wight ex Hultén," and he claimed that this name was illegitimate. It is evident from Hultén's publication, however, that his intent was to provide a name at the species level for the taxon that had earlier been named *P. alpinum* var. *lapathifolium* Cham. & Schlecht. He stated (p. 612): "*P. alaskanum* was transferred from variety to species by Wight in the manuscript flora of Alaska by Standley, and I therefore keep this name, although it was not published, especially as the first varietal name of the plant, *lapathifolium*, cannot be used, as it is already occupied" [note: cf. *Polygonum lapathifolium* L.]. Article 41.3 of ICBN (Greuter, 1988) specifies that "In order to be validly published, a name of a species must be accompanied . . . (b) by a reference to a previously and effectively published description or diagnosis of a species or infraspecific taxon. . . ." This requirement is met by Hultén's citation both of "*Polygonum alpinum* γ *lapathifolium* Cham. & Schlecht. in *Linnaea* 3 (1828) p. 38" and "*Polygonum alpinum Alaskanum* Small, Monogr. N. Amer. Spec. Polyg. (1895) p. 33." A regulation in ICBN which mentions the option of using previously illegitimate epithets in a new position or sense is Art. 72, Note 1: "When a new epithet is required, an author may adopt an epithet previously given to the taxon in an illegitimate name if there is no obstacle to its employment in the new position or sense; the resultant combination is treated as the name of a new taxon or as a *nomen novum*, as the case may be." At the time of Hultén's work, no other specific epithet had been published for this taxon; therefore, Art. 72, which deals with rejected names and *nomina nova*, does not strictly apply. I mention it here as an example of a rule that sanctions the use of illegitimate epithets when forming new names in particular cases.

In his revision of *Aconogonon* (Meisn.) Reichenb. (*Polygonum* sect. *Aconogonon* Meisn.), Hong (1991) rejected the name "*Polygonum alaskanum* (Small) Wight ex Hultén" as illegitimate. Instead, Hong took up *Aconogonon hultenianum* (Yurtz.) Tzvel. (Novit. Syst. Plant Vasc. 24: 77. 1987), which is based on *Polygonum alaskanum* ssp. *hultenianum* Yurtz. (Bot. Zurn. 59: 1452.

1974; type from Fairbanks area, Alaska; collected in 1962). Hong also stated that the synonym *P. alpinum* ssp. *alaskanum* "(Small) Welsh" (1968), with the basionym attributed to Small rather than to Hultén, was illegitimate.

The original publication refers to "*Polygonum alaskanum* (Small) Wight" as a "*nov. comb.*" rather than a "*sp. nov.*" Despite Hultén's choice of phrases, we must retrospectively credit him with having named a new species by reference to a previously published description of the taxon at the varietal level. There appears to be no barrier to the acceptance of *Polygonum alaskanum* Wight ex Hultén as the earliest validly published name for the species.

Polygonum alaskanum is typified by plants of the pubescent phase of the species [to which Hong (1991) gave the name *Aconogonon hultenianum* var. *lapathifolium* (Cham. & Schlecht.) S.-P. Hong]. The usually glabrous, more eastern phase has as its earliest varietal name *P. alaskanum* var. *glabrescens* Hultén (1944). Because I favor use of the generic name *Polygonum* for these taxa, I leave to other workers the option of a new combination placing var. *glabrescens* in *Aconogonon*. The taxonomic assignment of *Polygonum alaskanum* varies in recent floristic works. It was merged with *P. phytolaccifolium* Meisn. ex Small by Hitchcock (1964) and with *P. alpinum* All. by Welsh (1968). The name "*Aconogonon alaskanum* (Small) Wight" mentioned by Hong (1991, p. 331) cannot be traced; however, there does exist the name *Aconogonon alaskanum* (Wight ex Hultén) Sojak [as "(Small) Sojak"], *Preslia* 46: 150. 1974. The name *Polygonum alaskanum* (Small) Wright [sic!] ex Harshberger (1928) is a *nomen nudum* published without description or bibliographic reference.

ACKNOWLEDGMENTS

I thank Stanley L. Welsh and James L. Reveal for helpful comments on the manuscript.

LITERATURE CITED

- GREUTER, W. (Chairman, Editorial Committee). 1988. International Code of Botanical Nomenclature. *Regnum Veg.* 118.
- HARSHBERGER, J. W. 1928. Tundra vegetation of central Alaska directly under the Arctic Circle. *Proc. Amer. Philos. Soc.* 67: 215-234.

- HITCHCOCK, C. L. 1964. *Polygonum*, pp. 139–168. In: Vascular Plants of the Pacific Northwest, pt. 2. Univ. of Washington Press, Seattle.
- HONG, S.-P. 1991. A revision of *Aconogonon* (= *Polygonum* sect. *Aconogonon*, Polygonaceae) in North America. *Rhodora* 93: 322–346.
- HULTÉN, E. 1944. *Polygonum*. In: Flora of Alaska and Yukon. Acta Univ. Lund. N. F. Avd. 2, Bd 40 (no. 1) 4: 609–624.
- KARTESZ, J. T. AND GANDHI, K. N. 1990. Nomenclatural notes for the North American flora. No. 2. *Phytologia* 68: 421–427.
- SMALL, J. K. 1895. A monograph of the North American species of the genus *Polygonum*. Mem. Dept. Bot. Columbia Coll. 1: 1–183.
- WELSH, S. L. 1968. Nomenclature changes in the Alaskan flora. *Great Basin Naturalist* 28: 147–156.

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